electric vehicle'' means an on-road or nonroad vehicle that—

(A) is propelled by an internal combustion engine or heat engine using—

(i) any combustible fuel; and

(ii) an on-board, rechargeable storage device; and

(B) has no means of using an off-board source of electricity.

(4) FUEL CELL VEHICLE.—The term ''fuel cell vehicle'' means an on-road or nonroad vehicle that uses a fuel cell (as defined in section 803 of the Energy Policy Act of 2005 (42 U.S.C. 16152)).

(5) INITIATIVE.—The term ''Initiative'' means the Advanced Battery Initiative established by the Secretary under subsection (f)(1).

(6) NONROAD VEHICLE.—The term ''nonroad vehicle'' has the meaning given the term in section 216 of the Clean Air Act (42 U.S.C. 7550).

(7) PLUG-IN HYBRID ELECTRIC VEHICLE.—The term ''plug-in hybrid electric vehicle'' means an on-road or nonroad vehicle that is propelled by an internal combustion engine or heat engine using—

(A) any combustible fuel;

(B) an on-board, rechargeable storage device; and

(C) a means of using an off-board source of electricity.

(8) PLUG-IN HYBRID FUEL CELL VEHICLE.—The term ''plug-in hybrid fuel cell vehicle'' means a fuel cell vehicle with a battery powered by an off-board source of electricity.

(9) INDUSTRY ALLIANCE.—The term ''Industry Alliance'' means the entity selected by the Secretary under subsection (f)(2).

(10) INSTITUTION OF HIGHER EDUCATION.—The term ''institution of higher education'' has the meaning given the term in section 2 of the Energy Policy Act of 2005 (42 U.S.C. 15801).

(11) SECRETARY.—The term ''Secretary'' means the Secretary of Energy.

(c) GOALS.—The goals of the electric drive transportation technology program established under subsection (e) shall be to develop, in partnership with industry and institutions of higher education, projects that focus on—

(1) innovative electric drive technology developed in the United States;

(2) growth of employment in the United States in electric drive design and manufacturing;

(3) validation of the plug-in hybrid potential through fleet demonstrations; and

(4) acceleration of fuel cell commercialization through comprehensive development and commercialization of the electric drive technology systems that are the foundational technology of the fuel cell vehicle system.

(d) ASSESSMENT.—Not later than 120 days after the date of enactment of this Act, the Secretary shall offer to enter into an arrangement with the National Academy of Sciences—

(1) to conduct an assessment (in cooperation with industry, standards development organizations, and other entities, as appropriate), of state-of-the-art battery technologies with potential application for electric drive transportation;

(2) to identify knowledge gaps in the scientific and technological bases of battery manufacture and use;

(3) to identify fundamental research areas that would likely have a significant impact on the development of superior battery technologies for electric drive vehicle applications; and

(4) to recommend steps to the Secretary to accelerate the development of battery technologies for electric drive transportation.

(e) PROGRAM.—The Secretary shall conduct a program of research, development, demonstration, and commercial application for electric drive transportation technology, including—

(1) high-capacity, high-efficiency batteries;

(2) high-efficiency on-board and off-board charging components;

(3) high-powered drive train systems for passenger and commercial vehicles and for nonroad equipment;

(4) control system development and power train development and integration for plug-in hybrid electric vehicles, plug-in hybrid fuel cell vehicles, and engine dominant hybrid electric vehicles, including—

(A) development of efficient cooling systems;

(B) analysis and development of control systems that minimize the emissions profile when clean diesel engines are part of a plug-in hybrid drive system; and

(C) development of different control systems that optimize for different goals, including—

(i) battery life;

(ii) reduction of petroleum consumption; and

(iii) green house gas reduction;

(5) nanomaterial technology applied to both battery and fuel cell systems;

(6) large-scale demonstrations, testing, and evaluation of plug-in hybrid electric vehicles in different applications with different batteries and control systems, including—

(A) military applications;

(B) mass market passenger and light-duty truck applications;

(C) private fleet applications; and

(D) medium- and heavy-duty applications;

(7) a nationwide education strategy for electric drive transportation technologies providing secondary and high school teaching materials and support for education offered by institutions of higher education that is focused on electric drive system and component engineering;

(8) development, in consultation with the Administrator of the Environmental Protection Agency, of procedures for testing and certification of criteria pollutants, fuel economy, and petroleum use for light-, medium-, and heavy-duty vehicle applications, including consideration of—

(A) the vehicle and fuel as a system, not just an engine; and

(B) nightly off-board charging; and

(9) advancement of battery and corded electric transportation technologies in mobile source applications by—

(A) improvement in battery, drive train, and control system technologies; and

(B) working with industry and the Administrator of the Environmental Protection Agency—

(i) to understand and inventory markets; and

(ii) to identify and implement methods of removing barriers for existing and emerging applications.

(f) ADVANCED BATTERY INITIATIVE.—

(1) IN GENERAL.—The Secretary shall establish and carry out an Advanced Battery Initiative in accordance with this subsection to support research, development, demonstration, and commercial application of battery technologies.

(2) INDUSTRY ALLIANCE.—Not later than 180 days after the date of enactment of this Act, the Secretary shall competitively select an Industry Alliance to represent participants who are private, for-profit firms, the primary business of which is the manufacturing of batteries.

(3) RESEARCH.—

(A) GRANTS.—The Secretary shall carry out research activities of the Initiative through competitively-awarded grants to—

(i) researchers, including Industry Alliance participants;

(ii) small businesses;

(iii) National Laboratories; and

(iv) institutions of higher education.

(B) INDUSTRY ALLIANCE.—The Secretary shall annually solicit from the Industry Alliance—

(i) comments to identify advanced battery technology needs relevant to electric drive technology;

(ii) an assessment of the progress of research activities of the Initiative; and

(iii) assistance in annually updating advanced battery technology roadmaps.

(4) AVAILABILITY TO THE PUBLIC.—The information and roadmaps developed under this subsection shall be available to the public.

(5) PREFERENCE.—In making awards under this subsection, the Secretary shall give preference to participants in the Industry Alliance.

(g) COST SHARING.—In carrying out this section, the Secretary shall require cost sharing in accordance with section 988 of the Energy Policy Act of 2005 (42 U.S.C. 16352).

(h) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section $300,000,000 for each of fiscal years 2007 through 2012.

Subtitle F—Strategic Petroleum Reserve

SEC. 8601. STRATEGIC PETROLEUM RESERVE.

(a) FINDINGS.—The Senate finds that—

(1) the Strategic Petroleum Reserve, as established by the Energy Policy and Conservation Act (42 U.S.C. 6201 et seq.), provides the United States with an emergency crude oil supply reserve that ensures that a disruption in commercial oil supplies will not threaten the United States economy;

(2) the Energy Policy Act of 2005 (42 U.S.C. 15801 et seq.) strengthened the Strategic Petroleum Reserve by authorizing a capacity of 1,000,000,000 barrels of crude oil;

(3) as of the date of enactment of this Act, the inventory in the Strategic Petroleum Reserve is sufficiently large enough to guard against supply disruptions during the time period for the temporary cessation of deposits described in subsection (b)(1); and

(4) the cessation of deposits to the Strategic Petroleum Reserve will add approximately 2,000,000 barrels of crude oil supply into the market.

(b) SENSE OF THE SENATE.—It is the sense of the Senate that—

(1) consistent with the authority granted under the Energy Policy and Conservation Act (42 U.S.C. 6201 et seq.), the Secretary of Energy should cease deposits to the Strategic Petroleum Reserve for a period of not less than 6 months;

(2) the Secretary of Energy should continue to work toward establishing the infrastructure necessary to achieve the 1,000,0000,0000 barrels of crude oil capacity authorized under the Energy Policy Act of 2005 (42 U.S.C. 15801 et seq.); and

(3) after the temporary cessation of deposits to the Strategic Petroleum Reserve, the Secretary of Energy should continue to increase the inventory of crude oil in the Strategic Petroleum Reserve to work toward meeting the authorized capacity level to enhance the energy security of the United States.

Subtitle G—Arctic Coastal Plain Domestic Energy

SEC. 8701. SHORT TITLE.

This subtitle may be cited as the ''Arctic Coastal Plain Domestic Energy Security Act of 2006''.

SEC. 8702. DEFINITIONS.

In this subtitle:

(1) COASTAL PLAIN.—The term ''Coastal Plain'' means that area identified as such in